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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,721	07/18/2003	Elliott K. Stava	LEEE 200324	1573
27885	7590	06/10/2005	EXAMINER	
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			WHITTINGTON, KENNETH	
			ART UNIT	PAPER NUMBER
			2862	

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/621,721	<b>Applicant(s)</b> STAVA, ELLIOTT K.	
	<b>Examiner</b> Kenneth J. Whittington	<b>Art Unit</b> 2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-30 is/are allowed.
- 6) ☒ Claim(s) 1, 7, 9, 11, 19 and 31-35 is/are rejected.
- 7) ☒ Claim(s) 2-6, 8, 10, 12-18 and 36-40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.


#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
Bot Ledynh  
Primary Examiner

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/18/03</u> . | 6) <input type="checkbox"/> Other: ____  |

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## DETAILED ACTION

### *Abstract*

Applicant is reminded of the proper language and format for  
5 an abstract of the disclosure.

The abstract should be in narrative form and generally  
limited to a single paragraph on a separate sheet within the  
range of 50 to 150 words. It is important that the abstract not  
10 exceed 150 words in length since the space provided for the  
abstract on the computer tape used by the printer is limited.  
The form and legal phraseology often used in patent claims, such  
as "means" and "said," should be avoided. The abstract should  
describe the disclosure sufficiently to assist readers in  
15 deciding whether there is a need for consulting the full patent  
text for details.

The language should be clear and concise and should not  
repeat information given in the title. It should avoid using  
20 phrases which can be implied, such as, "The disclosure  
concerns," "The disclosure defined by this invention," "The  
disclosure describes," etc.

The abstract of the disclosure is objected to because on  
25 line 1, it contains terms that can be implied, i.e., "is  
provided". Correction is required. See MPEP § 608.01(b).

### *Claim Objections*

Claim 30 is objected to because of the following  
30 informalities: "said length" lack antecedent basis. It appears  
this claim should depend from claim 29, not claim 20 since claim  
29 has a reference to lengths. Appropriate correction is  
required. For purposes of examination, this claim will be  
interpreted as depending from claim 29.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs  
of 35 U.S.C. 102 that form the basis for the rejections under  
5 this section made in this Office action:

A person shall be entitled to a patent unless -

10 (e) the invention was described in (1) an application for patent, published  
under section 122(b), by another filed in the United States before the  
invention by the applicant for patent or (2) a patent granted on an  
application for patent by another filed in the United States before the  
invention by the applicant for patent, except that an international  
15 application filed under the treaty defined in section 351(a) shall have the  
effects for purposes of this subsection of an application filed in the  
United States only if the international application designated the United  
States and was published under Article 21(2) of such treaty in the English  
language.

Claims 1, 7, 9, 11, 19 and 31-34 are rejected under 35  
U.S.C. 102(e) as being anticipated by Migliori et al. (US  
20 6,844,722). Regarding claims 1 and 31, Migliori et al.  
discloses an apparatus and method for determining the thickness  
of a conductive cored tube having a hollow core, comprising:

an induction coil surrounding a path (See FIGS. 3 and 4,  
item 6);

25 a source of AC current connected across the coil (See FIGS.  
3 and 4, item 1);

a first circuit to measure inductive reactance of the coil  
(See same figures, note circuitry associated with coil 6);

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a second circuit to compare the measured inductive reactance with a reference inductive reactance (See FIGS. 3 and 4, coil 7 and circuitry associated thereto); and

an output device responsive a difference between the  
5 measured inductive reactance and the reference inductive reactance to indicate the magnitude of the physical characteristic (See FIGS. 3 and 4, item 5).

Regarding claim 7, Migliori et al. discloses the reference inductive reactance being across a reference coil with a  
10 selected reference core in the reference coil (See col. 5, lines 55-57, col. 2, line 53 to col. 3, line 8, the Abstract and claim 1).

Regarding claim 9, Migliori et al. discloses the reference coil being a cored wire having an outer sheath of desired wall  
15 thickness (See col. 5, lines 55-57, col. 2, line 53 to col. 3, line 8, the Abstract and claim 1).

Regarding claim 11, Migliori et al. disclose the reference coil being in a bridge arrangement with the induction coil and driven mutually by the AC current (See Migliori et al. FIGS. 3  
20 and 4, note circuit arrangement and AC current source 1).

Regarding claim 19, Migliori et al. discloses a visual mechanism to display the magnitude of the physical

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characteristic (See FIGS. 3 and 4, note oscilloscope 5 and result display at FIGS. 16 and 17).

Regarding claim 32, Migliori et al. discloses the reference inductive reactance being provided by an AC energized reference  
5 coil having a fixed core (See FIGS. 3 and 4, item 7 and col. 5, lines 55-67).

Regarding claims 33 and 34, Migliori et al. discloses the reference core representing a length of cored wire having the desired wall thickness (See col. 2, line 53 to col. 3, line 8).

10

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at  
20 the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for  
25 establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
- 5 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Migliori et al. Migliori et al. discloses an apparatus and method for determining the thickness of a conductive cored tube having a hollow core, comprising an induction coil surrounding a path (See FIGS. 3 and 4, item 6); a source of AC current connected across the coil (See FIGS. 3 and 4, item 1); a first circuit to measure inductive reactance of the coil (See same figures, note circuitry associated with coil 6); a second circuit to compare the measured inductive reactance with a reference inductive reactance (See FIGS. 3 and 4, coil 7 and circuitry associated thereto); and an output device responsive a difference between the measured inductive reactance and the reference inductive reactance to indicate the magnitude of the physical characteristic (See FIGS. 3 and 4, item 5). However, Migliori et al. does not disclose the specific length of the coil. Nonetheless, it would have been obvious at the time the invention was made for a person having ordinary skill in the art to use a specific length of a coil, such as six inches. One would have been motivated to do so to fit the coil

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in a particular apparatus or measure the thickness of a particular tubing or pipe. Furthermore, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. See *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984). Because Migliori et al. discloses all of the features of the claimed apparatus and operates in the same manner, claim 35 is not patentably distinct from the apparatus of Migliori et al.

#### ***Allowable Subject Matter***

Claims 20-30 are allowed over the prior art.

Claims 2-6, 8, 10, 12-18 and 36-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Regarding claims 20-30, while the prior art discloses a method and apparatus for measuring the thickness of a wall of a

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tubular pipe (See Migliori et al.) or an optical cable sheath (See Kingbury US 5,142,228), the prior art does not disclose such methods or apparatus measuring the thickness characteristic of a cored welding wire.

5           Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10           The following is a statement of reasons for the indication of allowable subject matter:

          Regarding claims 2, 8, 12 and 36, while the prior art discloses a method and apparatus for measuring the thickness of a wall of a tubular pipe (See Migliori et al.) or an optical  
15 cable sheath (See Kingbury US 5,142,228), the prior art does not disclose such methods or apparatus being applied to a cored welding wire such that the physical characteristic is the thickness of the sheath of the cored welding wire.

          Regarding claims 3-6, 10, 13, 18 and 37-40, because of  
20 their dependency to claims 2, 8, 12 and 26, have allowable subject matter for the same reasons therefor.

          Regarding claim 14, while the prior art discloses a method and apparatus for measuring the thickness of a wall of a tubular

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or solid pipe or wire (See Linder US 5,509,902), the prior art does not disclose such methods or apparatus being applied to a solid welding wire such that the physical characteristic is the thickness of the cored welding wire.

5        Regarding claims 15-17, based on their dependency to claim 14, have allowable subject matter for the same reasons therefor.

### ***Conclusion***

10        The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art teaches varying methods and apparatus for measuring thicknesses of coatings for wires, thicknesses of tubular pipes and similar devices.

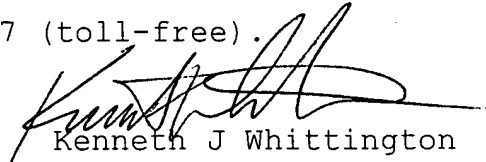
15        Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Whittington whose telephone number is (571) 272-2264. The examiner can normally be reached on Monday-Friday, 7:30am-4:00pm.

20        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status  
5 information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10

  
Kenneth J Whittington  
Examiner  
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kjw